

HIGHWAY 71/72 (OLD CITGO) REFINERY

LOUISIANA

EPA ID# LAD981054075

REGION 6
CONGRESSIONAL DISTRICT 04
Bossier Parish
Bossier City

Updated 7/1/97

Site Description

- Location:** • The Highway 71/72 (Old Citgo) Refinery Site is located in downtown Bossier City, Louisiana, about 2 miles east of downtown Shreveport and 1,800 feet northeast of the Red River. The former refinery site consisted of about 215 acres.
- Population:** • Bossier City (population 52,721 in 1990)
- Setting:** • The site is primarily urban. In 1966 and 1967, the site was cleared for development. From 1968 to the present, the site has been fully developed. Private residences, multi-family dwellings, and commercial and light industrial establishments now cover a large portion of the former refinery site.
- Hydrology:** • The Red River flows in a south to southeasterly direction across Bossier and Caddo Parishes and eventually empties into the Mississippi River. The uppermost occurrence of ground water is in the Quaternary age alluvial deposits of the Red River. Ground water in the alluvial deposits is generally under artesian pressure.

Wastes and Volumes

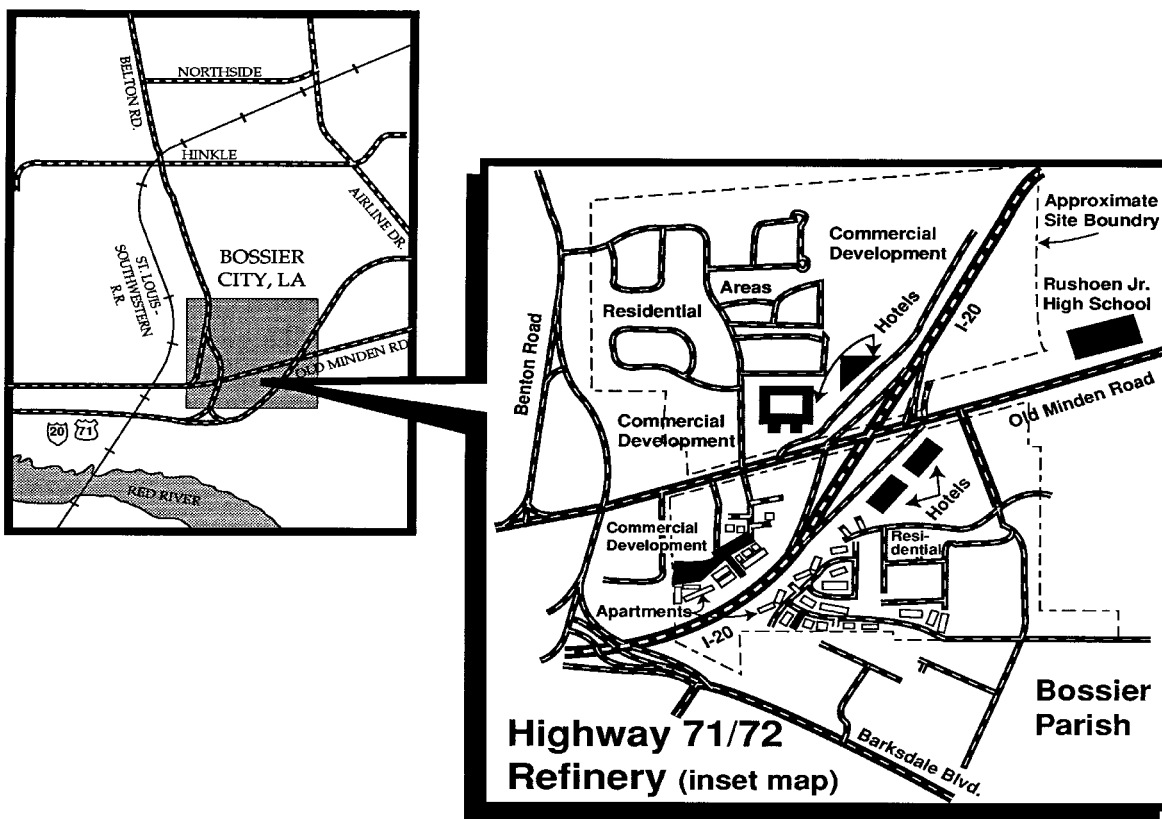
- Concentrations of lead up to 11,000 parts per million (ppm) in some surface soils accessible to the public.
- Floating, free-phase hydrocarbon liquid on shallow ground water (1,234,000 gallons).
- Hydrocarbon gases were detected in the soil on over 25% of the former refinery site.
- Tar-like material containing polynuclear aromatic hydrocarbons oozes to the surface in some residential and commercial areas.
- More than half a dozen waste deposits are buried under developed properties.

Site Assessment and Ranking

NPL LISTING HISTORY

Site HRS Score: 50.00
Proposed Date: 2/13/95
Final Date: Pending
NPL Update: No. 18

Site Map and Diagram



The Remediation Process

Site History:

- 1923- Louisiana Oil Refining Corporation built a refinery on the Site for the production of home heating and fuel oils. The site included a 120-acre bulk storage area and a 95-acre refinery process area.

- 1936 to 1948- Arkansas Fuel Oil Company operated the refinery.
- 1948- refinery operations shut down and process equipment was dismantled leaving tanks, bulk storage and railroad tank car cleaning operations.
- 1953- the Arkansas Fuel Oil Company merged with Arkansas Natural Gas Corporation to form the Arkansas Fuel Oil Corporation (AFOC).
- 1955- tanks and bulk storage were leased to third parties.
- 1961- AFOC's name was changed to Cities Service Oil Company.
- 1967- Site was cleared of tanks and refinery equipment for development as a commercial and residential area.
- 1982- Cities Service Oil Company was acquired by OXY USA, Inc.
- 1986- the site was evaluated by using the old (no ingestion pathway) Hazard Ranking System (HRS) model; it scored below 28.5.
- 1988- EPA referred the site to Louisiana Department of Environmental Quality (LDEQ) for action under State authority.
- 1990- 47 families were evacuated from an on site apartment complex due to high indoor air quality problems related to hydrocarbon gas seepage. (Several units are still unoccupied). Two hotels periodically close several first floor rooms due to customer complaints of noxious odors and headaches.
- 1991 to 1994- Site was investigated by OXY USA, Inc. (OXY) under an administrative agreement with LDEQ. The investigation included soil, surface and ground water samples.
- 1992- EPA conducted an expanded site inspection to reevaluate the site using the revised HRS model that reflects ingestion pathway.
- 1994- OXY and LDEQ announced that studies show no emergency health risks on site, but potential for long term health risks is recognized. LDEQ asks EPA to complete site evaluation under Federal authorities and resources.
- 1995- The Highway 71/72 (aka "Old Citgo) site was proposed for addition to the National Priorities List of Superfund sites.

Health Considerations:

- Areas where lead wastes are in surface soils could present health threats to children.
- Indoor air pollution may render living units unfit for human habitation.
- Liquid hydrocarbons on surface ground water may be a source of indoor air pollution.
- Buried wastes may present a health threat if excavated and improperly disposed of in the future.

Other Environmental Risks:

- Ecological risks are indeterminate at this time due to the urban nature of the site.

Record of Decision

Signed: None to date

Community Involvement

- Community Involvement Plan: 12/95
- Open houses and workshops: 2/95, 6/95, 8/95
- Original Proposed Plan Fact Sheet and Public Meeting:
- Original ROD Fact Sheet:
- Milestone Fact Sheets: 2/15/95
- Citizens on site mailing list: 1500
- Site Repository: Bossier Parish Library, 2206 Beckett, Bossier City, LA

Technical Assistance Grant

- Availability Notice: March 1995
- Letters of Intent Received: None
- Final Application Received: N/A
- Grant Award: N/A
- Current Status: No recent inquiries.

Fiscal and Program Management

- **Remedial Project Manager:** Cindy Kaleri, 214/665-6772, EPA (6SF-LP)
- **State Contact:** Charles Andrews, LDEQ, 504/765-0487
- **Community Involvement Coord.:** Donn Walters, 214/665-6483, EPA (6SF-PO)
- **Attorney:** Jim Costello, 214/665-8045, EPA (6SF-DL)
- **State Coordinator (EPA):** Joe Massey, 214/665-7408, Mail Sta. 6SF-LL
- **EPA Prime Contractor:** Mission Research Corporation, Albuquerque, NM
- **PRP Prime Contractor:** Conestoga Rovers Associates, Ontario Canada

Cost Recovery:

- PRPs Identified: CanadianOxy Offshore Production Co. is the corporate successor (OXY USA Inc. is the indemnitor, with contractual liability for, Canadianoxy)
- Viable PRP's: CanadianOxy Offshore Production Company

Present Status and Issues

- EPA's proposed addition of the site to the NPL resulted in strong criticism from members of Congress involved in reauthorization of the Superfund law and from OXY USA. OXY submitted over 2,000 pounds of comments in opposition to proposed NPL status.
- Special Notice letters were sent to OXY on June 5, 1995, requesting a good faith offer to removal lead contaminated soils and complete hydrocarbon contamination studies.
- EPA's July 1995 appropriations legislation chided the Agency for adversely affecting the Bossier City economy and for requiring unnecessary additional tests.
- In a July 21, 1995, meeting facilitated by Congressman McCrery's staff, EPA met with OXY, LDEQ, and Bossier City officials to discuss concerns of all parties. As a result of this meeting, EPA proposed an 'Agreement in Principle' among participants.
- By September 10, 1995, all four parties (EPA, LDEQ, OXY, and Bossier City) signed the Agreement in Principle. The Agreement provides for:
 - EPA to proceed to remedy selection without additional preliminary testing.
 - OXY to remove surface soils with more than 500 ppm lead under an administrative order on consent.
 - OXY and EPA to agree to a judicial consent decree that provides for pumping and treatment of liquid hydrocarbons on shallow ground water, corrective action at living units with indoor air pollution caused by the site, and a trust fund to pay for disposal of wastes uncovered in the future.
 - The City and State will establish institutional controls for the site.
- On October 6, 1995, EPA transmitted to OXY USA Inc. a draft Administrative Order on Consent (AOC) for a physical removal action to remove lead contaminated surface soils from the site. Negotiations on the AOC with OXY resulted in extended discussions and eventually failed.
- On July 31, 1996, a Unilateral Administrative Order (UAO) was issued requiring CanadianOxy Offshore Production Co. (COPCO), OXY's indemnitor, to perform a cleanup of lead-contaminated soil primarily in high access areas, that is, in public areas where children play. Lead-contaminated soil removals were specifically required in three predetermined areas with requirements for additional sampling in other specified potential removal areas. On August 16, 1996, EPA issued an amendment to the UAO requiring lead-contaminated soil removals in six additional areas. The lead-contaminated removals began January 23, 1997, and were completed in March 26, 1997. Approximately 11,000 tons of lead-contaminated soils were removed.
- From June 4 to June 28, 1996, EPA conducted an indoor air screening and sampling inspection at approximately 30 on-site single family residences, four multi-family apartment complexes, three hotels, and one office building - totaling 92 units - for airborne contaminants. On December 22, 1996, EPA issued a UAO to COPCO for a removal action to clean up benzene-contaminated indoor air in certain units on-site and conduct testing in other units to determine if corrective

measures were needed. Indoor air abatement activities began March 7, 1997. Five of the 92 units tested by EPA showed benzene concentrations greater than 10 parts per billion (ppb). Glenn Springs Holdings, Inc., COPCO's representative, completed corrective actions at these five residences in the Spring of 1997. About 20 other units were tested due to actual benzene measurements of 10 ppb or greater or due to the close proximity to the five units with benzene levels measured at greater than 10 ppb. Glenn Springs, Inc., will continue to monitor units at residence requests and take corrective actions as needed through about June 1998.

- EPA anticipates issuing a proposed plan for any remaining remedial action at the site for public comment in October 1997.

Benefits

- Implementation of indoor air testing at some residential units and corrective action follow-up to address benzene contamination in indoor air removed the exposure pathway to local residents.
- Innovative partnership with PRP's and the community- The Agreement in Principle, an innovative partnership with Potentially Responsible Parties (PRPs), unifies government interests at the site and accelerates site actions. Instead of up to 8 years of additional study (the national average for these types of sites), final cleanup of contaminated soils began less than a year from the proposed addition of the site to the NPL. The agreement also allowed the community to avoid the stigma of a Superfund designation since final placement on the National Priorities List (NPL) will not be pursued while OXY follows through on site agreements and necessary long-term clean up actions and associated arrangements.